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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Heikki Huomo

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EXAMINER

RAMPURIA, SHARAD K

ART UNIT

PAPER NUMBER

2617

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/817,401	HUOMO ET AL.	
	Examiner	Art Unit	
	Sharad Rampuria	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15, 18-34, 37-48, 51-59 and 62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15, 18-34, 37-48, 51-59 and 62 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-15, 18-34, 37-48, 51-59 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Nykanen et al.** [US 20020173295] in view of **Shteyn; Yevgeniy Eugene et al.** [US 6782253 B1].

As per claim 1, Nykanen teaches:

An apparatus (Abstract, Pg.1; 0007, Pg.7; 0119), comprises:

A context engine configured for storing context-related information, the context-related information having been created based upon at least a portion of at least one condition; (e.g. processing the context-related information based upon profile and further meta-data vector; Pg.8; 0124-0127)

Wherein the context engine is also configured for managing an exchange of the context-related information with at least one context consumer; (Pg.8; 0128-0130)

A communication manager configured for communicating with at least one context consumer for receiving at least one context rule and exchanging context-related information, at least one context consumer being located external to the apparatus, wherein at least one context rule includes at least one condition relating to at least a portion of context-related information, and at least one action to be performed; (e.g. Once the condition is satisfied ... the user's wireless device to access other portions of the user's private data; ¶ 0061, 0131-0132) and

Nykanen doesn't teach specifically, script engine configured for executing at least a portion of at least one context rule, including performing at least a portion of a respective at least one action, based on a comparison of the respective at least one condition value and at least one condition measured by at least one sensor. However, **Shteyn** advocates in an analogous art, that a script engine configured for executing at least a portion of at least one context rule, including performing at least a portion of a respective at least one action, based on a comparison of the respective at least one condition value and at least one condition measured by at least one sensor. (e.g. The user may have a number of profiles, set up for different contexts. The user may explicitly select a profile to be used in process 204, e.g., 'shopping', or have one of his/her profiles optionally triggered by a signal from the environment or time of day (e.g., through a

functional connection to calendar). Moreover, the environment (or network cell) might, for consenting users, download to the mobile phone a top-level structure (or guide) for the classes of possible signals on the beacons available in the geographic area. For example, on entering a shopping mall the user causes such a guide to be downloaded. The guide contains indications of beacon-associated services for a variety of cafes, shops, amusements, utility services, etc. This download will aid the structuring of the negotiation and of the alerts with which the user's mobile device can interact. At download time, some user pre-filtering of the classes of services embraced might also be done, e.g., to only sense certain beacons in the area and ignore others bearing unwanted service classes. A hierarchic beacon organization can be set up for the geographic location. Col.7; 13-61) Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify **Nykanen** including script engine configured for executing at least a portion of at least one context rule, including performing at least a portion of a respective at least one action, based on a comparison of the respective at least one condition value and at least one condition measured by at least one sensor in order to provide a method and device for easily defining new information services for delivery to customers in a user-friendly manner.

As per claim 2, Nykanen teaches:

A mobile station according to claim 1, wherein the context engine comprises:

A blackboard configured of storing the context-related information; (Pg.8; 0124-0125)

and

A subscription manager configured of providing at least one subscription to at least a portion of the context-related information to at least one context consumer. (140; Fig. 2A, Pg.8; 0124)

As per claim 3, Nykanen teaches:

A mobile station according to claim 2, wherein the context-related information is configured of being at least one of retrieved from and stored by the blackboard. (Pg.8; 0124-0125)

As per claim 4, Nykanen teaches:

A mobile station according to claim 1, wherein the context-related information is stored as at least one context atom that comprises at least a name and an associated value. (Pg.8; 0124-0125)

As per claim 5, Nykanen teaches:

A mobile station according to claim 4, wherein the at least one context atom further comprises at least one of a timestamp, a source identifier, a reliability of the respective value, and an accuracy of the respective value. (Pg.8; 0132)

As per claim 6, Nykanen teaches:

A mobile station according to claim 5, wherein at least a portion of the context-related information is based upon at least one of a timestamp, a source identifier, a reliability of the

respective value, and an accuracy of the respective value. (Pg.8; 0132)

As per claim 7, Nykanen teaches:

A mobile station according to claim 1 further comprising: a subscription manager configured of permitting at least one context consumer to subscribe to at least one event regarding at least a portion of the context-related information. (Pg.8; 0120, 0124)

As per claim 8, Nykanen teaches:

A mobile station according to claim 1, wherein the context engine is configured storing context-related information from at least one context producer, and wherein the at least one context producer comprises at least one of an application internal to the mobile station, an application external to the mobile station and a user of the mobile station. (Pg.8; 0132)

As per claim 9, Nykanen teaches:

A mobile station according to claim 1 further comprising: at least one sensor configured of measuring at least a portion of at least one condition of at least one of the mobile station and a user of the mobile station. (Pg.7; 0116-0117)

As per claim 10, Nykanen teaches:

A mobile station according to claim 9, wherein the at least one sensor is further configured of processing the portion of the at least one condition into context-related information. (Pg.7; 0116-0117)

As per claim 11, Nykanen teaches:

A mobile station according to claim 1 further comprising: a privacy engine configured of providing at least a portion of at least one of security and privacy to the exchange of the context-related information. (Pg.9; 0134)

As per claim 12, Nykanen teaches:

A mobile station according to claim 11, wherein the privacy engine is configured of operating in accordance with at least one rule to one of grant and deny permission to exchange context-related information with at least one context consumer. (Pg.8; 0130, Pg.9; 0134)

As per claim 13, Nykanen teaches:

A mobile station according to claim 1, wherein the communication manager is configured of managing connectivity with at least one context producer for the exchange of context-related information, and wherein the communication manager is further configured of abstracting at least one communication technology such that the context engine is configured of operating independent of the at least one communication technology. (Pg.10; 0153)

As per claim 14, Nykanen teaches:

A mobile station according to claim 1, wherein the context engine is configured of transmitting at least a portion of the context-related information to at least one context consumer external to the mobile station such that the at least one context consumer is configured of

determining a context of the mobile station based upon the transmitted portion of the context-related information. (Pg.9; 0133)

As per claim 15, Nykanen teaches:

A mobile station according to claim 1, wherein the context engine is configured of communicating with at least one external device according to a context exchange protocol that defines a format in which the context-related information is at least one of transmitted and received. (Pg.10; 0154)

As per claim 18, Nykanen teaches:

A mobile station according to claim 17, wherein a context consumer comprises an application for monitoring a health of a user of the mobile station, wherein at least one context rule relates to the health of the user, and wherein the respective at least one context rule comprises at least a portion of at least one condition relating to the health of the user, and an alert to be issued when the respective portion of the at least one condition is satisfied. (Pg.7; 0115, 0117)

As per claim 19, Nykanen teaches:

A mobile station according to claim 1 further comprising: at least one application program interface configured of facilitating at least one of the transmission and reception of context-related information. (Pg.10; 0154)

As per claim 20, Nykanen teaches:

A communications system (Abstract, Pg.1; 0007, Pg.7; 0119) comprising:

At least one context producer configured of creating context-related information; (Pg.5; 0092-0094)

At least one context consumer configured of determining a context based upon the context-related information; (Pg.8; 0128-0130) and

A mobile station configured of storing context-related information created by the at least one context producer, wherein the mobile station is also configured of managing an exchange of the context-related information between the at least one context producer and the at least one context consumer. (Pg.5; 0092-0094)

Nykanen doesn't teach specifically, wherein the mobile station comprises a script engine configured for executing at least a portion of at least one context rule, including performing at least a portion of a respective at least one action, based on a comparison of the respective at least one condition value and at least one condition is measured by at least one sensor. However, **Shteyn** advocates in an analogous art, that wherein the mobile station comprises a script engine configured for executing at least a portion of at least one context rule, including performing at least a portion of a respective at least one action, based on a comparison of the respective at least one condition value and at least one condition is measured by at least one sensor. (e.g. Col.7; 13-61).

As per claim 21, Nykanen teaches:

A communications system according to claim 20, wherein the mobile station comprises a context engine configured of storing the context-related information, and providing at least one subscription to at least a portion of the context-related information to the at least one context consumer. (Pg.8; 0128-0130)

As per claim 22, Nykanen teaches:

A communications system according to claim 21, wherein the context-related information is configured of being at least one of retrieved from and stored by the context engine. (Pg.8; 0128-0130)

As per claim 23, Nykanen teaches:

A communications system according to claim 20, wherein the mobile station is configured of storing context-related information as at least one context atom that comprises at least a name and an associated value. (Pg.8; 0125)

As per claim 24, Nykanen teaches:

A communications system according to claim 23, wherein the mobile station is configured of storing context-related information as at least one context atom that further comprises at least one of a timestamp, a source identifier, a reliability of the respective value, and an accuracy of the respective value. (Pg.8; 0132)

As per claim 25, Nykanen teaches:

A communications system according to claim 24, wherein at least a portion of the context-related information is based upon at least one of a timestamp, a source identifier, a reliability of the respective value, and an accuracy of the respective value. (Pg.8; 0132)

As per claim 26, Nykanen teaches:

A communications system according to claim 20, wherein the mobile station comprises a subscription manager configured of permitting at least one context consumer to subscribe to at least one event regarding at least a portion of the context-related information. (Pg.8; 0133)

As per claim 27, Nykanen teaches:

A communications system according to claim 20, wherein the at least one context producer comprises at least one of an application internal to the mobile station, an application external to the mobile station and a user of the mobile station. (Pg.7; 0117-0118, Pg.8; 0131)

As per claim 28, Nykanen teaches:

A communications system according to claim 20, wherein the at least one context producer comprises at least one sensor configured of measuring at least a portion of at least one condition of at least one of the mobile station and a user of the mobile station. (Pg.7; 0117-0118, Pg.8; 0131)

As per claim 29, Nykanen teaches:

A communications system according to claim 28, wherein the at least one sensor is further configured of processing the portion of the at least one condition into context-related information. (Pg.7; 0117-0118, Pg.8; 0131)

As per claim 30, Nykanen teaches:

A communications system according to claim 20, wherein the mobile station comprises a privacy engine configured of providing at least a portion of at least one of security and privacy to the exchange of the context-related information. (Pg.5; 0098)

As per claim 31, Nykanen teaches:

A communications system according to claim 30, wherein the privacy engine is configured of operating in accordance with at least one rule to one of grant and deny permission to exchange context-related information with the at least one context consumer. (Pg.5; 0098)

As per claim 32, Nykanen teaches:

A communications system according to claim 20, wherein the mobile station comprises a communication manager configured of managing connectivity with the at least one context producer for the exchange of context-related information, and wherein the communication manager is further configured of abstracting at least one communication technology such that the mobile station is configured of operating independent of the at least one communication technology. (Pg.10; 0153)

As per claim 33, Nykanen teaches:

A communications system according to claim 20, wherein the mobile station is configured of transmitting at least a portion of the context-related information to the at least one context consumer external to the mobile station such that the at least one context consumer is configured of determining a context of the mobile station based upon the transmitted portion of the context-related information. (Pg.9; 0133)

As per claim 34, Nykanen teaches:

A communications system according to claim 20, wherein the mobile station is configured of communicating with at least one external device according to a context exchange protocol that defines a format in which the context-related information is at least one of transmitted and received. (Pg.10; 0154)

As per claim 37, Nykanen teaches:

A communications system according to claim 36, wherein a context consumer comprises an application for monitoring a health of a user of the mobile station, wherein at least one context rule relates to the health of the user, and wherein the respective at least one context rule comprises at least a portion of at least one condition relating to the health of the user, and an alert to be issued when the respective portion of the at least one condition is satisfied. (Pg.7; 0115, 0117)

As per claim 38, Nykanen teaches:

A communications system according to claim 20, wherein the mobile station comprises at least one application program interface configured of facilitating at least one of the transmission and reception of context-related information. (Pg.10; 0154)

As per claim 39, Nykanen teaches:

A communications system according to claim 20 further comprising: at least one electronic device configured of communicating with the mobile station, wherein the at least one electronic device comprises a context engine configured of storing at least a portion of the context-related information stored by the mobile station. (Pg.8; 0124-0125)

As per claim 40, Nykanen teaches:

A method of managing context-related information with a mobile station, (Abstract, Pg.1; 0007, Pg.7; 0119) wherein the method comprises:

Measuring at least a portion of at least one condition; storing context-related information based upon the portion of the at least one condition; (Pg.8; 0124-0127) and

Managing an exchange of the context-related information with at least one context consumer, wherein managing the exchange comprises: receiving a request for at least a portion of the context-related information from a context consumer; (Pg.8; 0128-0130)

Determining whether to grant permission for the context consumer to receive the requested portion of the context-related information; and transmitting the requested portion of the context-related information when permission is granted. (Pg.5; 0098)

Nykanen doesn't teach specifically, executing at least one context rule, including performing at least a portion of a respective at least one action, respective based on a comparison of the respective at least one condition value and at least one condition is measured by at least one sensor. However, **Shiteyn** advocates in an analogous art, that executing at least one context rule, including performing at least a portion of a respective at least one action, respective based on a comparison of the respective at least one condition value and at least one condition is measured by at least one sensor. (e.g. Col.7; 13-61).

As per claim 41, Nykanen teaches:

A method according to claim 40, wherein managing an exchange of the context-related information further comprises: providing at least one subscription to at least a portion of the context-related information to the at least one context consumer. (140; Fig. 2A, Pg.8; 0124)

As per claim 42, Nykanen teaches:

A method according to claim 40, wherein storing context-related information comprises storing context-related information as at least one context atom that comprises at least a name and an associated value. (Pg.8; 0125)

As per claim 43, Nykanen teaches:

A method according to claim 42, wherein storing context-related information comprises storing context-related information as at least one context atom that further comprises at least one of a timestamp, a source identifier, a reliability of the respective value, and an accuracy of the respective value. (Pg.8; 0132)

As per claim 44, Nykanen teaches:

A method according to claim 43, wherein at least a portion-of the context-related information is based upon at least one of a timestamp, a source identifier, a reliability of the respective value, and an accuracy of the respective value. (Pg.8; 0132)

As per claim 45, Nykanen teaches:

A method according to claim 40, wherein measuring at least a portion of at least one condition comprises measuring at least a portion of at least one condition by at least one context producer comprising at least one of an application internal to the mobile station, an application external to the mobile station and a user of the mobile station. (Pg.7; 0117-0118, Pg.8; 0131)

As per claim 46, Nykanen teaches:

A method according to claim 40, wherein measuring at least a portion of at least one condition further comprises processing the portion of the at least one condition into context-related information. (Pg.7; 0117-0118, Pg.8; 0131)

As per claim 47, Nykanen teaches:

A method according to claim 40, wherein determining whether to grant permission comprises determining whether to grant permission in accordance with at least one rule. (Pg.5; 0098)

As per claim 48, Nykanen teaches:

A method according to claim 40, wherein transmitting the requested portion of the context-related information comprises transmitting the requested portion of the context-related information to at least one context consumer external to the mobile station such that the at least one context consumer is configured of determining a context of the mobile station based upon the transmitted portion of the context-related information. (Pg.9; 0133)

As per claim 51, Nykanen teaches:

A method according to claim 50, wherein a context consumer comprises an application for monitoring a health of a user of the mobile station, wherein at least one context rule relates to the health of the user, and wherein the respective at least one context rule comprises at least a portion of at least one condition relating to the health of the user, and an alert to be issued when the respective portion of the at least one condition is satisfied. (Pg.7; 0117-0118, Pg.8; 0131)

As per claim 52, Nykanen teaches:

A computer program (Pg.5; 0097) product for managing context-related information, the computer program product comprising at least one computer-readable storage medium having

computer-readable program code portions stored therein, the computer-readable program code portions (Abstract, Pg.1; 0007, Pg.7; 0119) comprising:

A first executable portion for receiving a measurement of at least a portion of at least one condition; (Pg.8; 0124-0127)

A second executable portion for storing context-related information based upon the portion of the at least one condition; (Pg.8; 0128-0130) and

A third executable portion for managing an exchange of the context-related information with at least one context consumer, wherein the third executable portion is adapted to receive a request for at least a portion of the context-related information from a context consumer, determine whether to grant permission for the context consumer to receive the requested portion of the context-related information, and when permission is granted, transmit the requested portion of the context-related information. (Pg.5; 0098)

Nykanen doesn't teach specifically, wherein the third executable portion is further adapted to execute at least one context rule, including performing at least a portion of a respective at least one action, respective based on a comparison of the respective at least one condition value and at least one condition measured by at least one sensor. However, **Shteyn** advocates in an analogous art, that wherein the third executable portion is further adapted to execute at least one context rule, including performing at least a portion of a respective at least one action, respective based on a comparison of the respective at least one condition value and at least one condition measured by at least one sensor. (e.g. Col.7; 13-61).

As per claim 53, Nykanen teaches:

A computer program product according to claim 52, wherein the third executable portion is further adapted to provide at least one subscription to at least a portion of the context-related information to the at least one context consumer. (140; Fig. 2A, Pg.8; 0124)

As per claim 54, Nykanen teaches:

A computer program product according to claim 52, wherein the second executable portion is adapted to store context-related information as at least one context atom that comprises at least a name and an associated value. (Pg.8; 0125)

As per claim 55, Nykanen teaches:

A computer program product according to claim 54, wherein the second executable portion is adapted to store context-related information as at least one context atom that further comprises at least one of a timestamp, a source identifier, a reliability of the respective value, and an accuracy of the respective value. (Pg.8; 0132)

As per claim 56, Nykanen teaches:

A computer program product according to claim 55, wherein at least a portion of the context-related information is based upon at least one of a timestamp, a source identifier, a reliability of the respective value, and an accuracy of the respective value. (Pg.8; 0132)

As per claim 57, Nykanen teaches:

A computer program product according to claim 52, wherein the first executable portion is further adapted to process the portion of the at least one condition into context-related information. (Pg.7; 0117-0118, Pg.8; 0131)

As per claim 58, Nykanen teaches:

A computer program product according to claim 52, wherein the third executable portion is adapted to determine whether to grant permission in accordance with at least one rule. (Pg.5; 0098)

As per claim 59, Nykanen teaches:

A computer program product according to claim 52, wherein the third executable portion is adapted to transmit the requested portion of the context-related information to at least one context consumer external to the mobile station such that the at least one context consumer is configured of determining a context of the mobile station based upon the transmitted portion of the context-related information. (Pg.9; 0133)

As per claim 62, Nykanen teaches:

A computer program product according to claim 61, wherein a context consumer comprises an application for monitoring a health of a user of the mobile station, wherein at least one context rule relates to the health of the user, and wherein the respective at least one context rule comprises at least a portion of at least one condition relating to the health of the user, and an

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alert to be issued when the respective portion of the at least one condition is satisfied. (Pg.7; 0117-0118, Pg.8; 0131)

Response to Amendments & Arguments

Applicant's arguments with respect to claims 1-15, 18-34, 37-48, 51-59 and 62 has been fully considered but is moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharad Rampuria whose telephone number is (571) 272-7870.

The examiner can normally be reached on M-F. (8:30-5 EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (571) 272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000 or

EBC@uspto.gov.

/Sharad Rampuria/
Primary Examiner
Art Unit 2617